

A NEW SPECIES AND SOME NEW RECORDS OF THE GENUS *OXYCERA* (DIPTERA: STRATIOMYIDAE) FROM TURKEY¹

Turgay Üstüner² and Abdullah Hasbenli³

ABSTRACT: A new species, *Oxycera quadrilineata* sp. n., is described from Turkey and diagnostic characters are illustrated and compared with four related species. *Oxycera galeata* (Lindner, 1975), *Oxycera grata* Loew, 1869 and *Oxycera pardalina* Meigen, 1822 are recorded for the fauna of Turkey for the first time.

KEY WORDS: Stratiomyidae, *Oxycera*, *Oxycera quadrilineata*, new species, Turkey

Only seven species of *Oxycera* (Stratiomyidae) have been recorded from Turkey (Üstüner et al. 2002, Üstüner and Hasbenli 2004, Woodley 2001). These species are *Oxycera insolata* Kühbandner, 1984, *Oxycera limbata* Loew, 1862, *Oxycera meigenii* Staeger, 1844, *Oxycera nigricornis* Olivier, 1811, *Oxycera pygmaea* (Fallén, 1817), *Oxycera trilineata* (Linnaeus, 1767) and *Oxycera turcica* Üstüner and Hasbenli, 2004. During our investigations of Turkish Stratiomyidae in the Tahtalı Mountains of Turkey, we discovered four species which represent interesting additions to the *Oxycera* fauna of Turkey. One of these species is a new species distinctly differing from the related species *Oxycera pardalina* Meigen, 1822, *Oxycera limbata* Loew, 1862, *Oxycera insolata* Kühbandner, 1984 and *Oxycera trilineata* (Linnaeus, 1767). Three of these species are recorded for the first time in Turkey.

Oxycera quadrilineata NEW SPECIES

(Figs. 1-8)

Holotype: Female, Turkey: Sivas, Gürün-Kindiralik Village, elev. 1819 m., July 16, 2002, coll. Üstüner and Hasbenli, deposited in the collection of the Zoological Museum of the Gazi University (ZMGU), Ankara in Turkey.

Paratypes: 3 females, Turkey: Sivas, Gürün-Kindiralik Village, elev. 1819 m., 16 July 2002 coll. Üstüner and Hasbenli. The paratype specimens are deposited in the collection of the Zoological Museum of the Gazi University (ZMGU), Ankara (coll. Hasbenli) and Selçuk University Department of Biology in Konya (coll. Üstüner) in Turkey. All specimens were collected in a grassy area surrounding a moist spring.

Diagnosis: Frons black with 2 yellow spots and a pair of long yellow stripes on sides. Antenna entirely black. There are 4 yellow longitudinal stripes on the mesonotum.

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² Selçuk University, Faculty of Arts and Science, Department of Biology, Kampüs 42100, Konya, Turkey. E-mail: tustuner@selcuk.edu.tr

³ Gazi University, Faculty of Arts and Science, Department of Biology, 06500 Teknikokullar, Ankara, Turkey. E-mail: hasbenli@gazi.edu.tr

Female: Eyes have quite short sparse hairs. Frons (Fig. 1) shining black, about 1/3 as broad as head. On the frons there are two yellow medial spots below the ocelli that do not reach the eye-margin. Broad lateral yellow areas present along eye margins extending from middle of frons below onto the face. Genae black. Postocular region (Fig. 2) broadly yellow, extending from upper angle of the eye to the postgena, interrupted at about upper one-third. Antenna entirely black. Scape and pedicel shining black. Antennal apical style is longer than rest of flagellum. Postociput, vertex (cerebrale behind of ocellar triangle) shining black. Labella yellow. Frons and postocular area with sparse, short, yellow hairs. Some long sparse hairs present on lower part of face and genae.

Thorax (Figs. 3 and 4) black, covered with sparse, short, yellow hairs. Four yellow longitudinal stripes present on mesonotum. Humeral callus and postalar callus are yellow. Yellow subnotopleural stripes widened posteriorly and extend to base of halteres. Scutellum and scutellar spines are yellow. Wings (Fig. 5) are transparent, cell r1 is golden yellow, R4 present, wing with stronger veins are golden yellow. Legs are mainly yellow. All femur are yellow, with the middle of exterior face of fore and mid tibia with a black stripe-like spot, hind tibia yellow with indistinct spot near middle. Fore tarsi entirely black. Tarsal segments 3 and 4 of mid and hind tarsi segments black. Halteres are light yellow with darkened stalk.

Abdomen (Fig. 6) shining black covered with sparse, short, yellow hairs. Lateral margin yellow beginning at anterior corner of tergum 2, enlarged into lateral markings on terga 2-4 that are rather broad on tergites 3 and 4, and somewhat more extended medially on tergite 4. There is a yellow apical spot on tergite 5. Venter is entirely black. Female terminalia (Figs. 7 and 8): Cerci are relatively long and one-segmented. Genital furca is slender, long and triangular. Anterior portion of genital furca slender. There is a small, posteromedial emargination on the furca. Posterolateral projections are long and broad on genital furca.

Length of body 6 mm., wing 5.5 mm.

Discussion: The four yellow stripes on the black mesonotum are very characteristic for this species. Although *Oxycera quadrilineata* sp.n. females resemble females of *Oxycera pardalina* Meigen, 1822, *Oxycera limbata* Loew, 1862, *Oxycera insolata* Kühbandner, 1984 and *Oxycera trilineata* (Linnaeus, 1767), it is different from them (Kühbandner 1984, Lindner 1936-1938, Rozkošný 1983).

Oxycera quadrilineata sp.n. has been carefully compared with the other species. The female of *O. limbata* has the antenna light brown with style black; 4 yellow spots at eye margin on the frons; and two narrow longitudinal stripes on the mesonotum. The female of *O. quadrilineata* sp. n., has the antenna entirely black, 2 yellow spots at eye margin on the frons, and four longitudinal stripes on mesonotum. The coloration of the abdomen of the new species is entirely different from the abdomen of *O. limbata*.

This species also differs from *Oxycera insolata* Kühbandner, 1984 and *Oxycera trilineata* (Linnaeus, 1767). There are no spots at eye-margin on the frons in *O. insolata* and *O. trilineata*. The notopleural stripe of *O. trilineata* is broader than in the new species and it is connected to the subnotopleural suture on mesonotum. And there are four yellow or green longitudinal stripes and three black longitudinal ground stripes on the mesonotum in the female of *O. trilineata*. This new

species appears to be related to *Oxycera pardalina* Meigen, 1822, but *O. pardalina* Meigen, 1822 has only two yellow longitudinal stripes on mesonotum in the female.

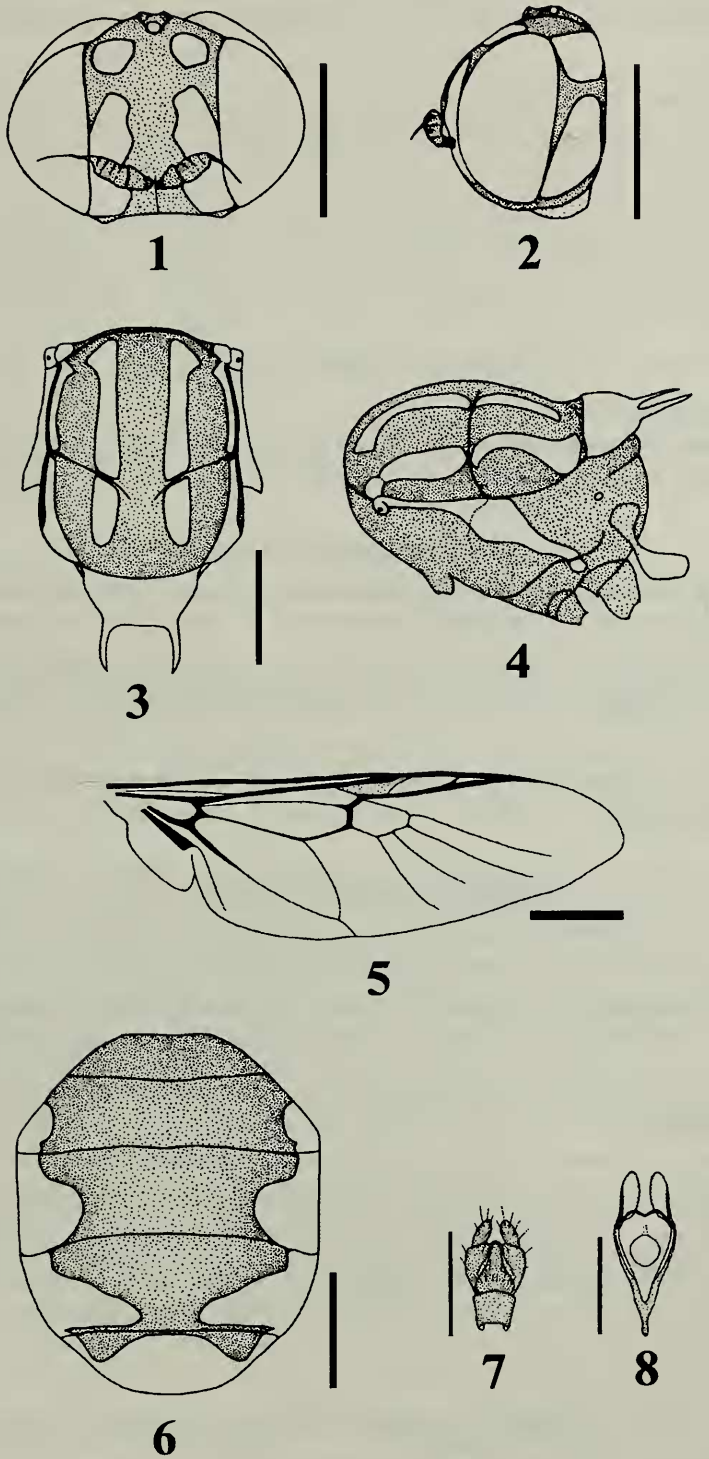


Fig. 1-8 *Oxycera quadrilineata* sp.n. female: 1. Head in frontal view, 2. Head in lateral view, 3. Thorax in dorsal view, 4. Thorax in lateral view, 5. Wing, 6. Abdomen in dorsal view. Scale bar: 1 mm.; female genitalia: 7. female terminalia in dorsal view, 8. genital furca. Scale bar: 0.25 mm.

A list of species of *Oxycera* newly recorded from Turkey

Oxycera galeata (Lindner, 1975)

Oxycera galeata was described by Lindner from Israel in 1975 as *Heraclina galeata*. *Oxycera galeata* (Lindner, 1975) is recorded for the fauna of Turkey for the first time.

Material Examined: 1 male: Turkey: Adana, Feke, Degirmenusagi Village, elev. 727 m, June 24, 2002, coll. Üstüner and Hasbenli. 1 female: Turkey: Adana, Feke, Degirmenusagi Village, elev. 727 m, June 24, 2002, coll. Üstüner and Hasbenli. 1 female: Turkey: Kayseri, Yahyali, Burhaniye Village, elev. 1414 m, July 13, 2002, coll. Üstüner and Hasbenli. 1 female: Turkey: Kayseri, Yahyali, Sogulca Plateau, elev. 1665 m, July 14, 2002, coll. Üstüner and Hasbenli. 1 female: Turkey: Kayseri, Sariz, Karapinar Village, elev. 1723 m, July 16, 2002, coll. Üstüner and Hasbenli. 2 male: Turkey: Adana, Saimbeyli, Avcipinari Village, elev. 1430 m, July 27, 2003, coll. Üstüner and Hasbenli.

Distribution: Palaearctic: Israel (Lindner, 1975; Lindner and Freidberg, 1978; Woodley, 2001).

Oxycera grata Loew, 1869

This species has been previously known only from Greece. The female we collected represents the first record for Turkey.

Material Examined: 1 female: Turkey: Sivas, Sarkisla, between Sarkisla and Pinarbasi, Basören Village, elev. 1810 m, June 23, 2003, coll. T. Üstüner and A. Hasbenli.

Distribution: Palaearctic: Greece (Kertész, 1908; Pleske, 1925a; Rozkošný, 1983; Woodley, 2001).

Oxycera pardalina Meigen, 1822

A Palaearctic species that ranges from Europe to west Europe and Caucasia. This species is recorded for the fauna of Turkey for the first time.

Material Examined: 1 female: Turkey: Kayseri, Tasci (Bakirdagi), Deresimli Village, elev. 1490 m, July 15, 2002, coll. Üstüner and Hasbenli. 1 female: Turkey: Kayseri, Tasci (Bakirdagi), Deresimli Village, elev. 1400 m, August 29, 2003, coll. Üstüner and Hasbenli.

Distribution: Palaearctic: Albania, Armenia, Austria, Belgium, Czech Republic, England, France, Georgia, Germany, Hungary, Ireland, Italy, Netherlands, Poland, Roumania, Russia, Slovakia, Spain, Sweden, Switzerland, Yugoslavia (Kertész, 1908; Pleske, 1925b; Séguy, 1926; Lindner, 1936-1938; Rozkošný, 1973; Dušek and Rozkošný, 1974; Rozkošný, 1983; Narchuk, 1988; Rozkošný and Nartshuk, 1988; Woodley, 2001).

Key to Species of *Oxycera* Meigen, 1803 of Turkey

1. Eyes contiguous, male. Mesonotum shining black, humeral cali and postalar cali with yellow spots, subnotopleural stripes yellow. Scutellum and scutellar spines yellow. Abdomen black, with yellow margin beginning at tergum 2 and yellow spots on terga 3-4.....*Oxycera galeata* (Lindner, 1975)
- Eyes broadly separated, females.....2

2. Mesonotum with yellow longitudinal stripes.....3
 – Mesonotum with yellow rectangular spot.....*Oxycera galeata* (Lindner, 1975)
3. Mesonotum with 4 yellow longitudinal stripes. Frons black with 2 yellow spots and a pair of long yellow stripes on sides.....*Oxycera quadrilineata* n.sp.
 – Mesonotum with 2 yellow longitudinal stripes.....4
4. Pteropleura with yellow spots, subnotopleura with wide yellow stripes. Abdominal side-markings on tergum 4 extend to the middle part of the tergum ...
*Oxycera grata* Loew, 1869
 – Pteropleura without yellow spots, subnotopleura with relatively narrow yellow stripes Abdominal side-markings on tergum 4 not extend to the middle part of the tergum*Oxycera pardalina* Meigen, 1822

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